

## AUTHOR INDEX

- Afanasova, N. V., see Baysogolov, G. D., 107  
 Ajani, J. A., see Rich, T. A., 209  
 Akine, Y., see Tokuuye, K., 55  
 Altendorfer, C., see Hammer, J., 66  
 Ardesi, A., see Fiorino, C., 167  
 Ariza, A., see Miralbell, R., 112  
 Arriagada, R., Mouriessse, H., Rezvani, A., Sarrazin, D., Clark, R. M., DeBoer, G. and Bush, R. S., Radiotherapy alone in breast cancer. Analysis of tumor and lymph node radiation doses and treatment-related complications, 1  
 Awwad, S., Hormonal abnormalities in survivors of primary brain tumours, 171
- Balart, J., see Miralbell, R., 112  
 Bamberg, M., see Stuschke, M., 245  
 Bartelink, H., see Gregoire, V., 46  
 Baysogolov, G. D., Shakhtarina, S. V. and Afanasova, N. V., Management of Hodgkin's disease patients with mediastinal adenopathy and pulmonary involvement (Stage IIE), 107  
 Begg, A. C., see Gregoire, V., 46  
 Bennett, M. H., see Crellin, A. M., 99  
 Bleehen, N. M., see Honess, D. J., 140  
 Brada, M., see Laing, R. W., 22  
 Breiter, N., Sassy, T. and Trott, K.-R., The effect of dose fractionation on radiation injury in the rat stomach, 223  
 Breitner, A., see Dörr, W., 36  
 Britton, J., see Laing, R. W., 22  
 Budach, V., see Stuschke, M., 245  
 Bush, R. S., see Arriagada, R., 1
- Calandrino, R., see Fiorino, C., 167  
 Caspers, R. J. L., Zwinderman, A. H., Griffioen, G., Welvaart, K., Sewsingh, E. N., Davelaar, J. and Leer, J.-W. H., Combined external beam and low dose rate intraluminal radiotherapy in oesophageal cancer, 7  
 Cattaneo, G. M., see Fiorino, C., 167  
 Chavaudra, N., see Vitu-Loas, L., 149  
 Chiang, C.-S., McBride, W. H. and Withers, H. R., Myelin-associated changes in mouse brain following irradiation, 229  
 Churei, H., see Tokuuye, K., 55  
 Cilliers, G. D. and Lochner, A., Radiation-induced damage of the Wistar rat heart: biochemistry and function, 216  
 Clark, R. M., see Arriagada, R., 1  
 Craven-Bartle, J., see Miralbell, R., 112  
 Crellin, A. M., Vaughan Hudson, B., Bennett, M. H., Harland, S. and Vaughan Hudson, G., Non-Hodgkin's lymphoma of the testis, 99
- Davelaar, J., see Caspers, R. J. L., 7  
 DeBoer, G., see Arriagada, R., 1  
 del Vecchio, A., see Fiorino, C., 167  
 Dennis, I. F., see Horsman, M. R., 131
- Dörr, W., Breitner, A. and Kummermehr, J., Capacity and kinetics of SLD repair in mouse tongue epithelium, 36  
 Dörr, W., Hirler, E. and Hönig, M., Response of mouse tongue epithelium to single doses of bleomycin and radiation, 237  
 Duma, C. M., see Flickinger, J. C., 91
- Egawa, S., see Tokuuye, K., 55  
 Eschwege, F., see Martin, L., 123  
 Ezzell, G., see Forman, J. D., 203
- Feldmann, H. J., see Stuschke, M., 245  
 Feroldi, P., see Galelli, M., 171  
 Fiorino, C., Fossati, V., Ardesi, A., Cattaneo, G. M., del Vecchio, A., Fusca, M., Longobardi, B., Signorotto, P. and Calandrino, R., Development of a computer-controlled moving bar (CCMB) conformal technique for neck irradiation, 167  
 Flickinger, J. C., Lunsford, L. D., Linskey, M. E., Duma, C. M. and Kondziolka, D., Gamma knife radiosurgery for acoustic tumors: multivariate analysis of four year results, 91  
 Forman, J. D., Orton, C., Ezzell, G. and Porter, A. T., Preliminary results of a hyperfractionated dose escalation study for locally advanced adenocarcinoma of the prostate, 203  
 Fosså, S. D. and Winderen, M., Does decreased skeletal uptake of <sup>99m</sup>Tc-methylene bisphosphonate in irradiated bone indicate the absence of bone metastases?, 63  
 Fosså, S. D., see Hannisdal, E., 117  
 Fossati, V., see Fiorino, C., 167  
 Fusca, M., see Fiorino, C., 167
- Galelli, M. and Feroldi, P., The time variable dose-rate in HDR stepping source brachytherapy, 171  
 Gall, F. P., see Grabenbauer, G. G., 59  
 Gery, B., Roussel, A. and Valla, A., Usefulness of radiotherapy in the treatment of advanced gastrinomas, 259  
 Grabenbauer, G. G., Schneider, I. H. F., Gall, F. P. and Sauer, R., Epidermoid carcinoma of the anal canal: treatment by combined radiation and chemotherapy, 59  
 Graham, J., see Laing, R. W., 22  
 Gregoire, V., Begg, A. C., Huiskamp, R., Verrijk, R., and Bartelink, H., Selectivity of boron carriers for boron neutron capture therapy: pharmacological studies with borocaptate sodium, L-boronophenylalanine and boric acid in murine tumors, 46  
 Griffin, R. J., see Song, C. W., 252  
 Griffioen, G., see Caspers, R. J. L., 7  
 Guichard, M., see Martin, L., 123  
 Guichard, M., see Vitu-Loas, L., 149
- Hagen, S., see Kaasa, S., 193  
 Hammer, J., Zoidl, J. P., Altendorfer, C., Seewald, D. H., Track, C., Stummvoll, W. and Labeck, W., Combined external and high dose rate intracavitary radiotherapy in the primary treatment of cancer of the uterine cervix, 66

- Hannisdal, E., Fosså, S. D. and Høst, H., Blood tests and prognosis in bladder carcinomas treated with definitive radiotherapy, 117
- Hara, T., see Tokuuye, K., 55
- Harland, S., see Crellin, A. M., 99
- Harrison, R. M., see Kotre, C. J., 73
- Heinerman, E. C. M., see Pop, L. A. M., 69
- Hines, F., see Laing, R. W., 22
- Hirler, E., see Dörr, W., 237
- Hoekstra, C. J. M., Koper, P. C. M. and van Putten, W. L. J., Recurrent endometrial adenocarcinoma after surgery alone: prognostic factors and treatment, 164
- Honess, D. J. and Bleehen, N. M., Effects of the radiosensitising agent nicotinamide on relative tissue perfusion and kidney function in C3H mice, 140
- Honess, D. J., see Horsman, M. R., 131
- Hönig, M., see Dörr, W., 237
- Høst, H., see Hannisdal, E., 117
- Horsman, M. R., Høyer, M., Honess, D. J., Dennis, I. F. and Overgaard, J., Nicotinamide pharmacokinetics in humans and mice: a comparative assessment and the implications for radiotherapy, 131
- Høyer, M., see Horsman, M. R., 131
- Huiskamp, R., see Gregoire, V., 46
- Iio, M., see Tokuuye, K., 55
- Janjan, N. A., An updated dose-response analysis in Hodgkin's disease, 80
- Janjan, N. A., Cardiac doses in post-operative breast irradiation, 77
- Kaanders, J. H. A., see Pop, L. A. M., 69
- Kaasa, S., Malt, U., Hagen, S., Wist, E., Moum, T. and Kvikstad, A., Psychological distress in cancer patients with advanced disease, 193
- Kalff, R. L., see Stuschke, M., 245
- Kondziolka, D., see Flickinger, J. C., 91
- Koper, P. C. M., see Hoekstra, C. J. M., 164
- Kotre, C. J. and Harrison, R. M., A micro-computer based CT and digital fluorography system for radiotherapy simulators, 73
- Kramer, S., see Regine, W. F., 13
- Kummermehr, J., see Dörr, W., 36
- Kvikstad, A., see Kaasa, S., 193
- Labeck, W., see Hammer, J., 66
- Laing, R. W., Warrington, A. P., Graham, J., Britton, J., Hines, F. and Brada, M., Efficacy and toxicity of fractionated stereotactic radiotherapy in the treatment of recurrent gliomas (phase I/II study), 22
- Lambin, P., see Martin, L., 123
- Lartigau, E., see Martin, L., 123
- Le Ridant, A. M., see Martin, L., 123
- Leer, J.-W. H., see Caspers, R. J. L., 7
- Leith, J. T., Letter to the Editor, 171
- Levin, B., see Rich, T. A., 209
- Linskey, M. E., see Flickinger, J. C., 91
- Lochner, A., see Cilliers, G. D., 216
- Longobardi, B., see Fiorino, C., 167
- Lubinski, B., see Martin, L., 123
- Lunsford, L. D., see Flickinger, J. C., 91
- Lusinchi, A., see Martin, L., 123
- Lyons, J. C., see Song, C. W., 252
- Makepeace, C. M., see Song, C. W., 252
- Malt, U., see Kaasa, S., 193
- Martin, L., Lartigau, E., Weeger, P., Lambin, P., Le Ridant, A. M., Lusinchi, A., Wibault, P., Eschwege, F., Lubinski, B. and Guichard, M., Changes in the oxygenation of head and neck tumors during carbogen breathing, 123
- Matias-Guiu, X., see Miralbell, R., 112
- McBride, W. H., see Chiang, C. -S., 229
- Mijnheer, B. J., see Wittkämper, F. W., 156
- Miralbell, R., Balart, J., Matias-Guiu, X., Molet, J., Ariza, A. and Craven-Bartle, J., Radiotherapy for supratentorial low-grade gliomas: results and prognostic factors with special focus on tumour volume parameters, 112
- Mohiuddin, M., see Regine, W. F., 13
- Molet, J., see Miralbell, R., 112
- Mornex, F., Nayel, H. and Taillandier, L., Radiation therapy for malignant astrocytomas in adults, 181
- Morrison, W. H., see Rich, T. A., 209
- Moum, T., see Kaasa, S., 193
- Mouriesse, H., see Arriagada, R., 1
- Nagane, M., see Tokuuye, K., 55
- Nayel, H., see Mornex, F., 181
- Nomura, K., see Tokuuye, K., 55
- Orton, C., see Forman, J. D., 203
- Ota, D., see Rich, T. A., 209
- Overgaard, J., see Horsman, M. R., 131
- Oyama, H., see Tokuuye, K., 55
- Pop, L. A. M., Kaanders, J. H. A. and Heinerman, E. C. M., High dose rate intracavitary brachytherapy of early and superficial carcinoma of the nasal vestibule as an alternative to low dose rate interstitial radiation therapy, 69
- Porter, A. T., see Forman, J. D., 203
- Pourquier, H., Adjuvant medical treatment for breast cancer at the crossroads, 79
- Regine, W. F., Mohiuddin, M. and Kramer, S., Long-term results of pediatric and adult craniopharyngiomas treated with combined surgery and radiation, 13
- Reinhardt, V., see Stuschke, M., 245
- Rezvani, A., see Arriagada, R., 1
- Rich, T. A., Ajani, J. A., Morrison, W. H., Ota, D. and Levin, B., Chemoradiation therapy for anal cancer: radiation plus continuous infusion of 5-fluorouracil with or without cisplatin, 209
- Roussel, A., see Gery, B., 259
- Sack, H., see Stuschke, M., 245
- Sarrazin, D., see Arriagada, R., 1
- Sassy, T., see Breiter, N., 223
- Satoh, M., see Tokuuye, K., 55
- Sauer, R., see Grabenbauer, G. G., 59
- Schneider, I. H. F., see Grabenbauer, G. G., 59



- Schratter, M., see Schratter-Sehn, A. U., 198
- Schratter-Sehn, A. U., Schurawitzki, H., Zach, M. and Schratter, M., High-resolution computed tomography of the lungs in irradiated breast cancer patients, 198
- Schurawitzki, H., see Schratter-Sehn, A. U., 198
- Seewald, D. H., see Hammer, J., 66
- Sewsingh, E. N., see Caspers, R. J. L., 7
- Shakhtarina, S. V., see Baysogolov, G. D., 107
- Shank, B., Hyperfractionation versus single dose irradiation in human acute lymphocytic leukemia cells: application to TBI for marrow transplantation, 30
- Shibui, S., see Tokuuye, K., 55
- Signorotto, P., see Fiorino, C., 167
- Song, C. W., Lyons, J. C., Griffin, R. J. and Makepeace, C. M., Thermosensitization by lowering intracellular pH with 5-(*N*-ethyl-*N*-isopropyl) amiloride, 252
- Stummvoll, W., see Hammer, J., 66
- Stuschke, M., Budach, V., Kalff, R. L., Sack, H., Bamberg, M., Reinhardt, V. and Feldmann, H. J., Spheroid control of malignant glioma cell lines after fractionated irradiation: relation to the surviving fractions at 2 Gy and colony forming efficiencies in a soft agar clonogenic assay, 245
- Taillandier, L., see Mornex, F., 181
- Thomas, C., see Vitu-Loas, L., 149
- Tokita, N., see Tokuuye, K., 55
- Tokuuye, K., Akine, Y., Tokita, N., Satoh, M., Churei, H., Tsukiyama, I., Egawa, S., Oyama, H., Nagane, M., Shibui, S., Nomura, K., Iio, M. and Hara, T., Linac-based small-field radiotherapy for brain tumors, 55
- Track, C., see Hammer, J., 66
- Trott, K. -R., see Breiter, N., 223
- Tsukiyama, I., see Tokuuye, K., 55
- Valla, A., see Gery, B., 259
- van Putten, W. L. J., see Hoekstra, C. J. M., 164
- Vaughan Hudson, B., see Crellin, A. M., 99
- Vaughan Hudson, G., see Crellin, A. M., 99
- Verrijck, R., see Gregoire, V., 46
- Vitu-Loas, L., Thomas, C., Chavaudra, N. and Guichard, M., Radiosensitivity, blood perfusion and tumour oxygenation after perflubron emulsion injection, 149
- Warrington, A. P., see Laing, R. W., 22
- Weeger, P., see Martin, L., 123
- Welvaart, K., see Caspers, R. J. L., 7
- Wibault, P., see Martin, L., 123
- Winderen, M., see Fosså, S. D., 63
- Wist, E., see Kaasa, S., 193
- Withers, H. R., see Chiang, C. -S., 229
- Wittkämper, F. W. and Mijnheer, B. J., Dose intercomparison at the radiotherapy centers in The Netherlands. 3. Characteristics of electron beams, 156
- Yaes, R. J., Using the LQ model in the clinic: Definition of normalized total doses, 171
- Zach, M., see Schratter-Sehn, A. U., 198
- Zoidl, J. P., see Hammer, J., 66
- Zwinderman, A. H., see Caspers, R. J. L., 7

## SUBJECT INDEX

- Acoustic neuroma, 91
- AIDS, 99
- Albumin, 117
- Amiloride, 252
- Anal canal carcinoma, 59
  
- Bladder neoplasms, 117
- Bleomycin, 237
- Blood perfusion, 149
- Blood sedimentation, 117
- Bone marrow transplantation, 30
- Boric acid, 46
- Borocaptate sodium (BSH), 46
- Boron compounds, 46
- Boron neutron capture therapy (BNCT), 46
- L-Boronophenylalanine (L-BPA), 46
- Brachytherapy, 7, 66, 69, 181
- Breast cancer, 1, 198
  
- C3H mouse mammary carcinoma, 131
- CDF1 mice, 131
- Cancer of the uterine cervix, 66
- Carbogen, 123
- Cell survival, 30
- Chemotherapy, 59, 181
- Cisplatin, 209
- Combined radiotherapeutic treatment, 164
- Complication grading, 1
- Complication rate, 1
- Computed tomography, 73
- Conformal radiotherapy, 167
- <sup>137</sup>Cs, 66
- 2',3'-Cyclic nucleotide phosphohydrolase, 229
  
- Dose gradient, 156
- Dose-escalation, 203
- Dosimetry intercomparison, 156
  
- ED<sub>50</sub>, 229
- EIPA, 252
- ELISA, 229
- Electron beam surface dose, 156
- Endometrial carcinoma, 164
- External skeletal radiotherapy, 63
- Extra-nodal, 99
  
- Factorial analysis of correspondences, 1
- 5-Fluorouracil, 209
- Fractionated irradiation, 55
- Fractionation, 36, 223
- Function, 216
  
- Gamma knife, 91
- Glioma, 22
  
- HDR-afterloading, 66
- Head and neck tumors, 123
- High dose rate, 69
- High grade astrocytoma, 181
- Hodgkin's disease, 107
- HRCT, 198
- Human, 131
- Human tumour cell lines, 245
- Hyperfractionated radiotherapy, 203
- Hyperfractionation, 30
- Hyperthermia, 252
  
- Interactions, 237
- Interstitial brachytherapy, 59
- Intracellular pH, 252
- <sup>192</sup>Ir, 66
  
- Lactate dehydrogenase, 117
- Leukemia, 30
- Linac, 55
- Localized pulmonary involvement, 107
- Locally advanced prostate cancer, 203
- Long-term results, 13
- Lymphoma, 99
  
- Malignant gliomas, 245
- Malignant tumor, 55
- Mediastinal index, 107
- Metabolism, 216
- Metastatic status, 63
- Metastatic, 193
- Mould, 69
- Mouse tongue mucosa, 36, 237
- Mouse tumors, 46
- Myelin basic protein, 229
  
- Nasal vestibule, 69
- Neck: therapeutic radiology, 167
- Neoplasm, 193
- Nicotinamide, 140
- Nicotinamide pharmacokinetics, 131
- Non-Hodgkin's, 99
- Normal tissues, 140
  
- Oesophageal cancer, 7
- Overall and disease-free survival, 107
- Oxygen carrier, 149
- Oxygenation, 149
  
- Palliation, 7, 193
- Pediatric and adult craniopharyngioma, 13
  
- pH and thermosensitivity, 252
- Pharmacokinetics, 46
- pO<sub>2</sub> measurements, 123
- Polarography, 123
- Prognostic factors, 112, 164, 181
- Psychological distress, 193
  
- Quality assurance, 156
- Quality of life, 193
  
- Radiation, 229, 237
- Radiation dose, 1
- Radiation effects, 216
- Radiation response, 36, 131
- Radiation therapy, 66, 181
- Radiation-induced lung disease, 198
- Radiosensitivity, 149, 245
- Radiosurgery, 22, 55, 91
- Radiotherapy, 7, 59, 91, 112, 117, 209
- Radiotherapy simulators, 73
- Radiotherapy treatment planning, 73
- Rat heart, 216
- Recurrent, 164
- Reduced skeletal uptake, 63
- Relative tissue perfusion, 140
- Renal function, 140
- Repair capacity, 36
- Repair kinetics, 36
- Residual injury, 223
- Rodent tumour, 149
- Rotational techniques, 167
  
- Soft agar clonogenic assay, 245
- Spheroids, 245
- Stereotactic, 91
- Stereotactic radiotherapy, 22
- Stomach radiation damage, 223
- Supratentorial low-grade gliomas, 112
- Surgery and radiation, 13
- Survival, 7
- Survival, 117
  
- <sup>99m</sup>Tc-methylene bisphosphonate, 63
- Testis, 99
- The brain, 55
- Therapeutic depth, 156
- Tolerance, 131
- Total body irradiation, 30
- Tumor oxygenation, 123
- Tumour volume, 164
  
- Vestibular schwannoma, 91
- Volume-response relationships, 112